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ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (GEMS) 136 S WISCONSIN ST PORT WASHINGTON, WI 53074			TIMBLIN, ROBERT M	
ART UNIT		PAPER NUMBER		
2167				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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M/N

Office Action Summary	Application No.	Applicant(s)
	10/633,290	GUPTA ET AL.
	Examiner	Art Unit
	Robert M. Timblin	2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 November 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 22-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 22-39 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/ are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

This action corresponds to application 10/633,290 filed 8/1/2003. Claims 22-39 are pending.

Claim Objections

In light of the amendments, the previous objection to claim 33 is withdrawn.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the computer readable storage medium found in claim 33 should be defined in the specification.

Claim Rejections - 35 USC § 101

The previous 35 U.S.C. 101 rejection pertaining to claims 33-37 has been withdrawn as the amendment to include a computer readable storage medium having stored thereon a sequence of instructions precludes the claim from including carrier waves and/or signals.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22, 24-31, 33, and 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by **Kennedy et al.** ('Kennedy' hereinafter) (U.S. Patent 6,963,847 B1). In the following citations and drawing references, Kennedy teaches:

With respect to claim 22, An automated method for visually displaying product production information and notifications in real-time comprising:

automatically querying (col. 20, line 51) a database (drawing reference 14, 16) for production data (abstract, col. 1 line 47, and col. 31 line 11) for each order (abstract, i.e. line items/component ATP requests) scheduled for production (abstract, col. 1 line 47, and col. 31 line 11) that includes a product category (col. 12, line 44 and col. 17, line 15-44; i.e. wheels and categories of axles) of each order (abstract, i.e. line items/component ATP requests), a promised shipping date (col. 26, lines 12 and 41) for each order (abstract, i.e. line items/component ATP requests), a requested shipping date (col. 13 line 39-41) for each order, and an expected sales revenue (col. 17, line 4-44, and col. 21 line 41-42) for each order (abstract, i.e. line items/component ATP requests), by a seller (drawing reference 16, 14 and col. 7 line 64-67) in real-time (col. 7-8, line 64-8, respectively);

for each order (abstract, i.e. line items/component ATP requests), automatically comparing the promised shipping date and the projected shipping date (col. 18 line 24-31);

for each order (abstract, i.e. line items/component ATP requests), automatically generating a proactive alert (col. 31 line 34-40, col. 33 line 33-40) if the projected shipping date is later than the promised shipping date (col. 18, line 54-60);

automatically determining a shipment quality metric (col. 14 line 54-59, and col. 33 line 49-55) for all orders that have shipped (col. 18 line 45-63); and

automatically displaying the proactive alert (col. 31 line 34-40, col. 33 line 33-40) for each order (abstract, i.e. line items/component ATP requests), the number of orders (col. 12 line 38-39) for each product category (co. 17 line 34-44), the expected revenue (col. 17, line 4-44, and col. 21 line 41-42) for each order and the shipment quality metric in a tabular format (drawing reference 36 and col. 5 line 34-26) on a user viewable medium (drawing reference 12).

With respect to claim 24, the method of claim 22 further comprising creating a plurality of display forms, wherein each display form depends on a number of days before the product is available (col. 17, line 15-20, col. 23 line 15-20 and col. 29 line 10-16).

With respect to claim 25, the method of claim 22 further comprising:

determining an acceptance range (col. 17 line 50-64); and

displaying a percentage of times the shipment quality metric is outside the acceptance range (col. 17 line 55-65).

With respect to claim 26, A computer-readable medium having stored thereon one or more computer programs that, when executed by one or more computers, causes the one or more computers to:

query (col. 20, line 51) a database (drawing reference 14, 16) for production data (abstract) for each order (abstract, i.e. line items/component ATP requests) scheduled for production (abstract) that includes a product category (col. 12, line 44 and col. 17, line 15-44; i.e. wheels and categories of axles) of each order (abstract, i.e. line items/component ATP requests), a promised shipping date (col. 26, lines 12 and 41) for each order (abstract, i.e. line items/component ATP requests), a requested shipping date (col. 13 line 39-41) for each order, and an expected sales revenue (col. 17, line 4-44, and col. 21 line 41-42) for each order (abstract, i.e. line items/component ATP requests), by a seller (drawing reference 16, 14 and col. 7 line 64-67) in real-time (col. 7-8, line 64-8, respectively);

create a sum of orders for all orders in a determined period of time (col. 17 line 30-44;

create a sum of revenue for the sum of orders (col. 3 line 33-40);

create a proactive alert (col. 31 line 34-40, col. 33 line 33-40) if the number of days before the product is available is later than the promised shipping date for each order (col. 18, line 54-60);

determine a shipment quality metric (col. 14 line 54-59, and col. 33 line 49-55) for shipped orders (col. 18 line 45-63); and

display the sum of products in production (col. 17; e.g. sum of wheels), the sum of products in production for each product category (col. 17 line 15-45; e.g. wheels and axel

categories), the sum of projected revenue for each product in production (col. 17 lines 34-44; e.g. the calculated revenue for each line item), the proactive alert (col. 31 line 34-40, col. 33 line 33-40) for each order (abstract, i.e. line items/component ATP requests), and the shipment quality metric (col. 14 line 54-59, and col. 33 line 49-55) in a tabular format (i.e. unified multidimensional quotation 36) on a user viewable medium (drawing reference 12).

With respect to claim 27, the computer-readable medium of claim 26 wherein the one or more programs further causes the one or more computers to:

query the database (drawing reference 14, 16) for saleable products in inventory (abstract, col. 16, line 45); and

determine a date each saleable product is available for shipment (col. 21 line 25-27).

With respect to claim 28, the computer-readable medium of claim 27 wherein the one or more computers to:

determine a number of days between a current date and the date each saleable product is available for shipment (col. 17 line 30-44); and

display a user-defined message (col. 18 line 55-60) for each determined number of days (col. 17 line 15-30 and col. 18 line 54-60).

With respect to claim 29, the computer-readable medium of claim 28 wherein a first message (col. 18 line 57) is displayed if the number of days before the product is available is

greater than a user-defined number (col. 10 line 44-45) and a second message (col. 21 line 8-11) is displayed if the number of days before the product is available is less than a user-defined number (col. 10 line 44-45).

With respect to claim 30, the computer-readable medium of claim 26 wherein the shipment quality metric is processed to provide a statistical measure of process capability (col. 178 line 55-60, col. 25 line 17-31).

With respect to claim 31, the computer-readable medium of claim 26 wherein the shipment quality metrics are regularly re-processed (col. 32 line 25-35).

With respect to claim 33, A computer data signal representing a sequence of instructions that, when executed by one or more processors, cause the one or more processors to:

query (col. 20, line 51) and update (col. 11 line 60 and figure 5) a database (drawing reference 14, 16) containing product production data (col. 20 line 45-55);

periodically (col. 30 line 39-57) obtain from the database (drawing reference 14, 16) a product category (col. 12, line 44 and col. 17, line 15-44; i.e. wheels and categories of axles) of each order (abstract, i.e. line items/component ATP requests), a promised shipping date (col. 26, lines 12 and 41) for each order (abstract, i.e. line items/component ATP requests), a projected shipping date (col. 17 line 21-22 and col. 21 line 26-27), for each order (abstract, i.e. line

items/component ATP requests), and a projected revenue (col. 17, line 4-44, and col. 21 line 41-42) for each order (abstract, i.e. line items/component ATP requests);

calculate a difference between the promised shipping date and the requested shipping date for each order (col. 12, line 44 and col. 17, line 15-44; i.e. wheels and categories of axles);

calculate a total revenue for each product in production for each product category (col. 17, line 4-44); and

display in a table (drawing reference 36 and col. 5 line 34-26), the number of days before the product is available (col. 17 line 21-44), the total revenue (col. 17, line 4-44, and col. 21 line 41-42) for each product in production for each product category (col. 17 line 33-44), and a proactive alert (col. 31 line 34-40, col. 33 line 33-40) for each order (abstract, i.e. line items/component ATP requests) if the projected shipping date (col. 17 line 21-22 and col. 21 line 26-27) for each order is later than the promised shipping date (col. 18, line 54-60).

With respect to claim 36, the computer data signal of claim 33 wherein the one or more processors is caused to obtain data every time information is requested (figures 2-5).

With respect to claim 37, the computer data signal of claim 33 wherein the table that the data is displayed in comprises a plurality of display forms, wherein each display form depends on the number of days before the product is available (col. 17 line 15-45, col. 18 line 50-60).

With respect to claim 38, the method of claim 22 further comprising:

for each order, automatically generating another proactive alert if the request date is within a preset number of days from a current date (col. 17 line 4-44); and automatically displaying generated proactive alerts in a tabular format on the user viewable medium (col. 21 line 5-11).

With respect to claim 39, the method of claim 38 further comprising automatically generating the another proactive alert if the request date is within two days from the current date (col. 18 line 55-60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 32, and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy as applied to claims 22, 24-31, 33, and 36-39 above, in view of Davis, Robert D et al.; “Detecting Process Shifts with X-bar charts; First Quarter 1993, Production and Inventory Management Journal, 34, 1, ABI/INFORM Global, p.25-31 (“Davis” hereafter).

With respect to claim 23 and similar claim 32, Kennedy fails to teach wherein the shipment quality metric is calculated by a formula:

$$Z_{LT} = \min\left[\frac{USL - \mu}{\sigma}, \frac{\mu - LSL}{\sigma}\right].$$

where USL is a preset upper specification limit, LSL is a preset lower specification limit, μ is a mean, and σ is a standard deviation.

Davis, however teaches this formula (i.e. figure 1, page 26, steps 4-5 on page 27, and step 1 of page 29) for determining process quality and a percentage of non conforming product. Davis further teaches that a process may shift its center point so that the bulk of the process observations are not centered exactly between the USL and LSL but are shifted (see Figure 1, b, and d). Davis notes that this shift can occur both based on a change in (process variation and a change in (process average. Since Davis teaches that process shifts can drive the tail of the distribution over either the LSL or USL and that the Z statistic measures the percentage of nonconforming material, it would be obvious to take the minimum Z statistic of either the USL or LSL, because it is old and well known in the art of six-sigma that a smaller Z stat means that a more defective product is being produced.

In the same field of endeavor, (i.e. determining process capability), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Davis would have given Kennedy a metric to measure shipment quality with the benefit of maximizing order fulfillment.

Claim 32, for containing essentially the same subject matter is similarly rejected with the same rationale of the rejection of claim 23.

With respect to claim 34, Kennedy fails to teach the computer data signal of claim 33 wherein the one or more processors are further caused to determine a quality metric for each category and display the quality metric in the table.

Davis, however, teaches wherein the one or more processors are further caused to determine a quality metric for each category and display the quality metric in the table. That is, Davis teaches determining a quality metric (page 25, col.1 paragraph 1; i.e. a quality characteristic described by a measured value) to monitor product conformity.

In the same field of endeavor, (i.e. determining process capability and product availability), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the quality metric of Davis would have given Kennedy a way to monitor product conformity to determine product availability in order to maximize order fulfillment.

With respect to claim 35, Kennedy fails to teach the computer data signal of claim 34 wherein the quality metric is a statistical value calculated and displayed is a projected defect in parts per million.

In the same field of endeavor, (i.e. determining process capability), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Davis would have given Kennedy a metric to measure shipment quality with the benefit of maximizing order fulfillment.

Davis, however, teaches the computer data signal of claim 34 wherein the quality metric is a statistical value calculated and displayed is a projected defect in parts per million (i.e. step 4 of page 29) to find the percentage of non conforming product.

Response to Arguments

Applicant's arguments filed in the remarks dated 11/6/2007 have been fully considered but they are not persuasive.

Applicant begins with disagreeing that Kennedy teaches orders scheduled for production (i.e. last paragraph of page 6 in the remarks). The Examiner disagrees.

The Examiner continues to maintain that Kennedy is clearly directed towards managing orders scheduled for production. Specifically, Kennedy teaches monitoring production plans of ATP requests throughout production logistics until order fulfillment (col.1 line 20). In other words, Kennedy is directed towards generating quotations for products, and upon acceptance or confirmation (by a client 12) concerning the quotation, the quotation is then an order that is scheduled for production.

The Applicant argues (last 8 lines of page 7 in the remarks) that Kennedy states (col. 18, lines 24-27) “that the reason for such distinction is that the quotation may be only an inquiry that does not consume any allocated product or available material or capacity”. Applicant states “that is, the quotation may or may not result in an order” and further that Kennedy ends at quotations prior to scheduling. The admittance that the quotation may result in an order supports the Examiner’s contention that Kennedy is involved with orders that are scheduled for production. In other words, Kennedy is directed towards **order fulfillment** in that once an order is placed (by a client), it is sought after that it is fulfilled (i.e. to make sure the order was complete and received). Subsequently after col. 18 lines 24-27, Kennedy teaches a quotation request may actually result in an ATP-consuming promise (Kennedy, col. 18 line 30-31). Furthermore, Kennedy supports the transition of a quote into an order scheduled for production. For example, Kennedy provides for quotation confirmations and promise acceptances (Kennedy, col. 3 line 9-10). Furthermore, Kennedy teaches a requesting client 12 may generate a quotation confirmation, each corresponding to a particular component ATP request. This in turn generates component promises that *consume* supply and form binding commitments between the customer and suppliers as requested products (see. Col. 5 lines 27-33). Basically put, a customer of Kennedy’s system places an order and receives a quote of that order. If that customer decides to agree to the items in the quotation, that quotation is then accepted and confirmed and thereby becoming an order scheduled for production. By this, it is seen that Kennedy does not end at quotations prior to order placement or scheduling. This fact is further solidified by Kennedy when they teach the sending of shipment notifications (col. 33 line 35) and monitoring shipment confirmations for a fully shipped status (col. 33 lines 51-52). In a system of order fulfillment,

Kennedy is therefore clearly and distinctly directed towards production data pertaining to “orders scheduled for production.”

Next, the Applicant argues (page 7, first full paragraph of the remarks) that Kennedy does not teach automatically comparing the promised shipping date and the projected shipping date for each order. As this limitation is not in the claims, it is assumed that the Applicant intends to argue that Kennedy does not teach automatically comparing the promised shipping date and the *requested* shipping date for each order (i.e. 3rd limitation of claim 22). The Examiner disagrees given the following:

In the Final Office Action, Kennedy was cited at col. 18 line 24-31 as well as col. 18 line 54-60 for the following and corresponding limitation (i.e. generating a proactive alert if the promise shipping date is later than the requested shipping date). The Examiner maintains that Kennedy compares the promised shipping date and the requested shipping date. Specifically, Kennedy evaluates quotation responses from ATP servers (col. 18 line 46-47). As seen in col. 26 line 12-14 of Kennedy, a response from an ATP server includes a promised ship date. Again, back to col. 18, Kennedy describes computing a component quotation that includes product availability information (line 46-47). Kennedy further teaches that if the ATP request fails to yield a valid component quotation, an annotated failure notification may include a message such as “unable to meet shipment delivery.” Interpreted in another way, if the requested date of shipping (contained in the request as Kennedy notes, col. 12 line 41-42) does not meet the promised date in the quotation a failure notification such as not being able to make delivery would be determined and proactively generated.

In addition, Applicant argues (last paragraph of page 7 and top of page 8 of the remarks) that Kennedy does not teach displaying proactive alerts, the number of orders for each product category, the expected revenue for each order and the shipment quality metric in a tabular format on a user viewable medium. The Examiner disagrees given the following:

The Examiner submits that Kennedy teaches automatically displaying the proactive alert (col. 31 line 34-40, col. 33 line 33-40) for each order (abstract, i.e. line items/component ATP requests), the number of orders (col. 12 line 38-39) for each product category (co. 17 line 34-44), the expected revenue (col. 17, line 4-44, and col. 21 line 41-42) for each order and the shipment quality metric in a tabular format (drawing reference 36 and col. 5 line 34-26) on a user viewable medium (drawing reference 12).

For example, Kennedy shows a sample multi-dimensional quote (col. 7 lines 30-44). Such a quote would indicate the categories of the line items (i.e. orders) in the quote. For example, the quote may contain either an order for simple axels or complex axels or wheels as categories of products requested (Kennedy, col. 17 line 16-17). The quotation calculates the number of orders and the revenue for each category. For example, an order of wheels for May 9 (col. 17 lines 35-35) includes an order of 40 wheels (in other words, 40 “orders” for wheels) and the computed revenue (i.e. $\$(22*40,+10*10+25*10)$) for the order. In this case, an order for 40 wheels would yield a revenue of \$1230. The revenue included in the quote is also specified in Kennedy, col. 21 line 41 (i.e. (13) computed total price for a line item). Furthermore, the number of orders for each category is expressed by Kennedy, col. 21 line 24-25 (i.e. (5) offered quantity). Moreover, the quotation may be mutated to reflect (i.e. include and therefore display) the notifications as described above (i.e. col. 18 line 54-61). Further yet, the shipment quality

metric of Kennedy (e.g. col. 33 line 50-54) may be displayed in tabular format when the ATP request is updated concerning the shipping status of the order.

The Applicant argues that a mere unified quotation does not teach or suggest displaying anything in a tabular format (page 8 of remarks). The Examiner disagrees because as given the broadest reasonable interpretation, a "tabular format" may simply be a list of items to be ordered. Kennedy sufficiently teaches this in a quotation of items requested by a client (i.e. see col. 1 lines 30-44). In another interpretation, the "tabular format" as claimed by Applicant may be interpreted as a database table (i.e. database tables contain rows and columns, or attributes). Again, Kennedy teaches this by use of a multi-dimensional quote as seen in col. 17 line 30-44. That is the quote as seen is a list of orders for wheels and axels along with the quantity desired and revenue for each order. In yet another interpretation, a table may even simply be a surface on which data is represented. As Kennedy teaches generating a quotation and communicating that quotation to the client (i.e. at least in the abstract) that Kennedy serves this interpretation of the claimed "tabular format."

Applicant also argues that Kennedy does not teach a sum of order for all orders in a determined period of time (2nd paragraph from the bottom of page 8) as required in present claim 26. The Examiner disagrees as this limitation is at least addressed by Kennedy in col. 17, line 30-44. For example, a period of time may be the orders requested for May 9. In this case 40 wheels may be summed as needed for the May 9 period of time. Further, and for another example of Kennedy teaching creating a sum of all orders for a determined period of time,

Kennedy teaches the request quantity (col. 12 line 38) that specifies the quantity or quantity range of product requested. Subsequently, a request date (i.e. period of time) specifies when the requested quantity is to arrive.

The Examiner respectfully submits that Applicant's arguments have been considered addressed seen in the foregoing. It is submitted that Kennedy teaches the present invention as claimed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

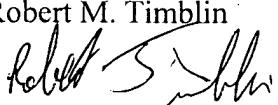
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert M. Timblin

Patent Examiner AU 2167


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TECHNOLOGY CENTER 2100